

Full Report (All Nutrients) 09054, Blueberries, frozen, unsweetened

Report Date: June 29, 2017 23:08 EDT

Nutrient values and weights are for edible portion.

Food Group : Fruits and Fruit Juices

Carbohydrate Factor: 3.6 Fat Factor: 8.37 Protein Factor:3.36 Nitrogen to Protein Conversion Factor:6.25

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup, unthawed 155g	1 package (20 oz) 567g
Proximates						
Water	g	86.59	3	0.573	134.21	490.97
Energy	kcal	51	--	--	79	289
Energy	kJ	213	--	--	330	1208
Protein	g	0.42	3	0.045	0.65	2.38
Total lipid (fat)	g	0.64	3	0.018	0.99	3.63
Ash	g	0.18	3	0.018	0.28	1.02
Carbohydrate, by difference	g	12.17	--	--	18.86	69.00
Fiber, total dietary	g	2.7	--	--	4.2	15.3
Sugars, total	g	8.45	--	--	13.10	47.91
Minerals						
Calcium, Ca	mg	8	3	2.486	12	45
Iron, Fe	mg	0.18	3	0.076	0.28	1.02
Magnesium, Mg	mg	5	3	0.731	8	28
Phosphorus, P	mg	11	3	2.351	17	62
Potassium, K	mg	54	3	1.202	84	306
Sodium, Na	mg	1	3	0.167	2	6
Zinc, Zn	mg	0.07	3	0.012	0.11	0.40
Copper, Cu	mg	0.033	3	0.007	0.051	0.187
Manganese, Mn	mg	0.147	3	0.087	0.228	0.833
Selenium, Se	µg	0.1	--	--	0.2	0.6
Vitamins						
Vitamin C, total ascorbic acid	mg	2.5	3	2.366	3.9	14.2

Nutrient	Unit	1			1 cup, unthawed 155g	1 package (20 oz) 567g
		Value Per100 g	Data points	Std. Error		
Thiamin	mg	0.032	3	0.001	0.050	0.181
Riboflavin	mg	0.037	3	0.005	0.057	0.210
Niacin	mg	0.520	3	0.012	0.806	2.948
Pantothenic acid	mg	0.125	3	0.024	0.194	0.709
Vitamin B-6	mg	0.059	3	0.002	0.091	0.335
Folate, total	µg	7	3	1.257	11	40
Folic acid	µg	0	--	--	0	0
Folate, food	µg	7	3	1.257	11	40
Folate, DFE	µg	7	--	--	11	40
Choline, total	mg	5.1	--	--	7.9	28.9
Vitamin B-12	µg	0.00	--	--	0.00	0.00
Vitamin B-12, added	µg	0.00	--	--	0.00	0.00
Vitamin A, RAE	µg	2	--	--	3	11
Retinol	µg	0	--	--	0	0
Carotene, beta	µg	28	--	--	43	159
Carotene, alpha	µg	0	--	--	0	0
Cryptoxanthin, beta	µg	0	--	--	0	0
Vitamin A, IU	IU	46	--	--	71	261
Lycopene	µg	0	--	--	0	0
Lutein + zeaxanthin	µg	68	--	--	105	386
Vitamin E (alpha-tocopherol)	mg	0.48	--	--	0.74	2.72
Vitamin E, added	mg	0.00	--	--	0.00	0.00
Vitamin D (D2 + D3)	µg	0.0	--	--	0.0	0.0
Vitamin D	IU	0	--	--	0	0
Vitamin K (phylloquinone)	µg	16.4	--	--	25.4	93.0
Lipids						
Fatty acids, total saturated	g	0.053	--	--	0.082	0.301
4:0	g	0.000	--	--	0.000	0.000
6:0	g	0.000	--	--	0.000	0.000
8:0	g	0.000	--	--	0.000	0.000
10:0	g	0.000	--	--	0.000	0.000
12:0	g	0.000	--	--	0.000	0.000
14:0	g	0.000	--	--	0.000	0.000

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup, unthawed 155g	1 package (20 oz) 567g
16:0	g	0.031	--	--	0.048	0.176
18:0	g	0.011	--	--	0.017	0.062
Fatty acids, total monounsaturated	g	0.091	--	--	0.141	0.516
16:1 undifferentiated	g	0.002	--	--	0.003	0.011
18:1 undifferentiated	g	0.087	--	--	0.135	0.493
20:1	g	0.000	--	--	0.000	0.000
22:1 undifferentiated	g	0.000	--	--	0.000	0.000
Fatty acids, total polyunsaturated	g	0.279	--	--	0.432	1.582
18:2 undifferentiated	g	0.167	--	--	0.259	0.947
18:3 undifferentiated	g	0.112	--	--	0.174	0.635
18:4	g	0.000	--	--	0.000	0.000
20:4 undifferentiated	g	0.000	--	--	0.000	0.000
20:5 n-3 (EPA)	g	0.000	--	--	0.000	0.000
22:5 n-3 (DPA)	g	0.000	--	--	0.000	0.000
22:6 n-3 (DHA)	g	0.000	--	--	0.000	0.000
Fatty acids, total trans	g	0.000	--	--	0.000	0.000
Cholesterol	mg	0	--	--	0	0
Amino Acids						
Tryptophan	g	0.002	--	--	0.003	0.011
Threonine	g	0.012	--	--	0.019	0.068
Isoleucine	g	0.013	--	--	0.020	0.074
Leucine	g	0.025	--	--	0.039	0.142
Lysine	g	0.008	--	--	0.012	0.045
Methionine	g	0.007	--	--	0.011	0.040
Cystine	g	0.004	--	--	0.006	0.023
Phenylalanine	g	0.015	--	--	0.023	0.085
Tyrosine	g	0.005	--	--	0.008	0.028
Valine	g	0.018	--	--	0.028	0.102
Arginine	g	0.022	--	--	0.034	0.125
Histidine	g	0.006	--	--	0.009	0.034
Alanine	g	0.018	--	--	0.028	0.102
Aspartic acid	g	0.033	--	--	0.051	0.187
Glutamic acid	g	0.052	--	--	0.081	0.295

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup, unthawed 155g	1 package (20 oz) 567g
Glycine	g	0.017	--	--	0.026	0.096
Proline	g	0.015	--	--	0.023	0.085
Serine	g	0.013	--	--	0.020	0.074
Other						
Alcohol, ethyl	g	0.0	--	--	0.0	0.0
Caffeine	mg	0	--	--	0	0
Theobromine	mg	0	--	--	0	0
Flavonoids						
Anthocyanidins						
Cyanidin 2 3	mg	4.36	2	--	6.76	24.72
Petunidin 3	mg	18.2	1	--	28.1	103.0
Delphinidin 2 3	mg	21.6	2	--	33.5	122.4
Malvidin 3	mg	49.6	1	--	77.0	281.5
Pelargonidin 2	mg	0.0	1	--	0.0	0.1
Peonidin 3	mg	0.5	1	--	0.7	2.7
Flavones						
Apigenin 2	mg	0.0	1	--	0.0	0.1
Luteolin 2	mg	1.8	1	--	2.8	10.2
Flavonols						
Kaempferol 2	mg	1.1	1	--	1.7	6.2
Myricetin 2 4	mg	1.8	7	0.33	2.7	10.0
Quercetin 2 4	mg	4.6	7	0.93	7.2	26.3
Proanthocyanidin						
Proanthocyanidin dimers 1	mg	6.1	5	0.33	9.4	34.4
Proanthocyanidin trimers 1	mg	5.4	5	0.51	8.3	30.4
Proanthocyanidin 4-6mers 1	mg	18.7	5	0.53	29.0	106.0
Proanthocyanidin 7-10mers 1	mg	3.9	5	0.78	6.0	21.8

¹Brownmiller, C., Howard, L.R., and Prior, R.L. **Processing and storage effects on procyanidin composition and concentration of processed blueberry products**, 2009 J. Agric. Food Chem. 57 pp.1896-1902

²Franke, A.A., Custer, L.J., Arakaki, C., and Murphy, S.P. **Vitamin C and flavonoid levels of fruits and vegetables consumed in Hawaii**, 2004 J. Food Comp. Anal. 17 pp.1-35

³Lee, J., Durst, R.W., and Wrolstad, R.E. **Impact of juice processing on blueberry anthocyanins and polyphenolics: comparison of two pretreatments**, 2002 J. Food Sci. 67 5 pp.1660-1667

⁴Häkkinen, S. H., Törrönen, A. R. **Content of flavonols and selected phenolic acids in strawberries and Vaccinium species: influence of cultivar, cultivation site and technique**, 2000 Food Res. Int. 33 pp.517-524